

**REJECTION CIRCUITRY FOR
VARIABLE-GAIN AMPLIFIERS AND CONTINUOUS-TIME FILTERS**

ABSTRACT OF THE DISCLOSURE

5 Variable-gain amplifiers (VGAs) and/or continuous-time filters (CTFs) are implemented with
circuitry that provides improved power-supply rejection. The power-supply rejection circuitry may
include a current source and a diode-connected MOSFET that inhibit noise in the reference-voltage
power supply from reaching the output nodes of the VGA or CTF. Although the present invention
enables separate implementations of VGAs and CTFs, in one embodiment, a VGA function and a CTF
10 function are implemented in a single set of (e.g., integrated) circuitry.